EXPLORATION LOG M-137

PROJECT: TRONOX PHASE B PROJECT NO.: 20092518V1 **EXPLORATION LOCATION:** TRONOX AREA 4 **EXPLORATION DATE: 7/27/2009** EXPLORATION SIZE (dia.): 6" CORE BARREL **EQUIPMENT: BOART SONIC CORE RIG ELEVATION: EXISTING GROUND SURFACE** LOGGED BY: BOART/KRISH **INITIAL DEPTH TO WATER: 54** DATE MEASURED: 7/27/09 FINAL DEPTH TO WATER: 54 DATE MEASURED: 7/27/09 CONSTRUCTION MOISTURE CONTENT (%) DRY DENSITY (pcf) % SWELL SOIL & SAMPLE **ELEVATION/** USCS ᆸ DESCRIPTION 屲 **DEPTH** SYMBOLS SM Alluvium. Pale brown (10YR 6/3) and moderate yellow brown (10YR 5/4) silty SAND. 60 70% m-cg sand with minor fg and vcg, SA, qtz and volc. frags, 20-30% silt, tr clay. Up to 10% volc. granules to 3/8 inch, SA-A, trace caliche to 19' then increasing to com. 23-30 feet. 2.5 7.5 10 11-11.5 feet, cobbles/pebbles to 3", A, volc.

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ELEVATION/ DEPTH	SOIL & SAMPLE SYMBOLS	uscs	DESCRIF	PTION	Id		MOISTURE CONTENT (%)	DRY DENSITY (pcf)	% SWELL	WELL
- 17.5 - 20 - 22.5 - 25 27.5	The descriptions contained	ML within this ex	19-23 feet, minor caliche coatings, moderate yellow minor cg SA sand and 10 and 23-30 feet, com. caliche a coatings and semi-hard obrown (10YR 7/4) in f-mg up to 50%. Muddy Creek Formation (orange (10YR 6/6) SILT, 5% clay. Minor scattered and coatings.	w brown (10YR 5/4), 1% granules to 3/8". as nodules to 1", grain sement, very pale sand matrix. Caliche sand matrix and matrix caliche with 5-10% vfg sand, caliche nodules to 1"		e explo	ration was	made		
F .	The descriptions contained to the state of t	within this ex is not intend	xploration log apply only at the specific ed to be representative of subsurface (exploration location and at the t	ime the	e explo	ration was	made.		

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ELEVATION/ DEPTH	SOIL & SAMPLE SYMBOLS	uscs	DESCRI	PTION	d		MOISTURE CONTENT (%)	DRY DENSITY (pcf)	% SWELL	WELL
- - - - - - - - - - - - - - - - - - -		ML	Dark yellowish brown (10 with 10-15% vfg sand, 1 scattered caliche nodule	-2% clay, minor				·		
- 75 77.5 			END OF BORING	AT 75.0 FEET						
- 80 - - - -						The second secon	e Production .	A STATE OF THE STA		

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